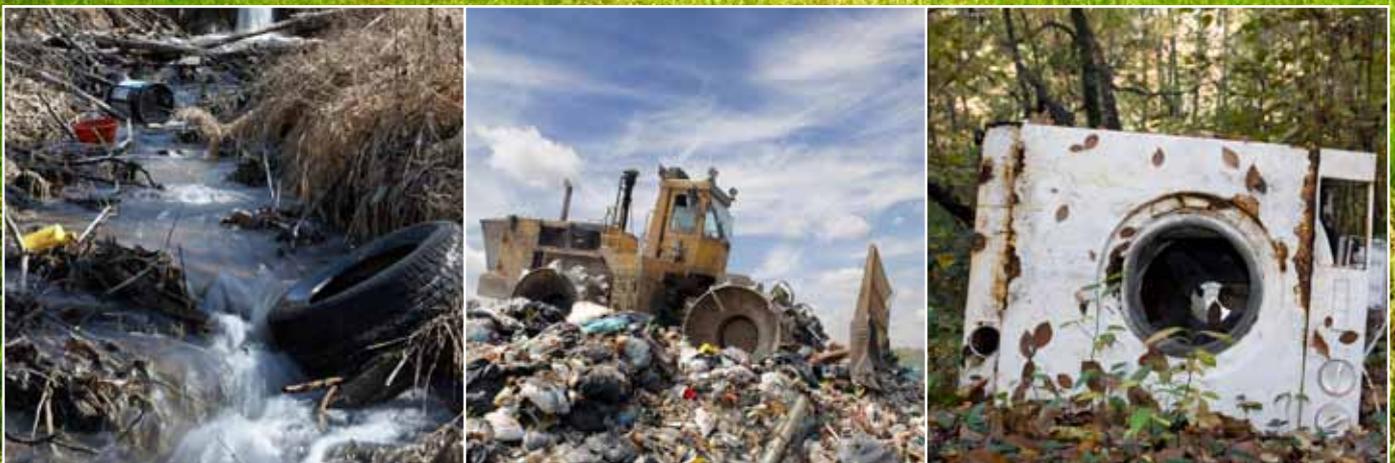




*Basingstoke
and Deane*

Basingstoke and Deane Borough Council

Contaminated Land Inspection Strategy



July 2011

Contents

1 Introduction

- 1.1 The Council's aims
- 1.2 Regulatory context
 - 1.2.1 The roles of the Borough Council and the Environment Agency
 - 1.2.2 Defining contaminated land
 - 1.2.3 Dealing with contaminated land
 - 1.2.4 Pollutant linkages and risk assessment
- 1.3 Review of progress since 2001

2 Characteristics of the Borough of Basingstoke and Deane

- 2.1 Geographical location
- 2.2 Brief description/history
- 2.3 Size
- 2.4 Population Distribution
- 2.5 Land owned by the Borough Council
- 2.6 Current land use characteristics
- 2.7 Protected locations
- 2.8 Key property types
- 2.9 Key water resources / protection issues
- 2.10 Known information on contamination
- 2.11 Current and past industrial history
- 2.12 Broad geological characteristics
- 2.13 Broad hydrogeological characteristics

3 The Basingstoke and Deane Borough Council strategy:

Overall aims

- 3.1 The Council's priorities
- 3.2 Work programme

4 Procedures

- 4.1 Internal management arrangements for inspection and identification
- 4.2 Considering local authority interests in land
- 4.3 Information collection
- 4.4 Information management
- 4.5 Complaints and voluntary information provision
 - 4.5.1 Complaints
 - 4.5.2 Confidentiality
 - 4.5.3 Voluntary provision of information
 - 4.5.4 Anonymously supplied information
 - 4.5.5 Release of information
 - 4.5.6 Anecdotal evidence
- 4.6 Risk Assessment
 - 4.6.1 CLEA and ICRCL guidelines
 - 4.6.2 Risk assessment for other substances
 - 4.6.3 Risk assessment for radioactive contaminated land
 - 4.6.4 Risk assessment for groundwater
- 4.7 Interaction with other regulatory regimes
 - 4.7.1 Planning
 - 4.7.2 Water pollution
 - 4.7.3 Environmental Permitting

5 Liaison and communication

- 5.1 Statutory consultees
- 5.2 Non-statutory consultees
- 5.3 Communicating with owners, occupiers and other interested parties
- 5.4 Powers of entry
- 5.5 Enforcement action
- 5.6 Risk communication
- 5.7 The public register
- 5.8 Provision of information to the Environment Agency

6 Review Mechanisms

- 6.1 Triggers for undertaking inspection
- 6.2 Triggers for reviewing inspection decisions
- 6.3 Reviewing the strategy

Appendix A: Works Maintenance Contracts, Property Transfers and Leasing Property

Appendix B: Planning and Building Control

Appendix C: Summary of Guidance from the Department of Environment, Food and Rural Affairs (DEFRA)

Appendix D: Glossary

Appendix E: Background Papers / References

Executive summary

The Contaminated Land (England) Regulations came into force on 1 April 2000. These regulations require the council to inspect land in the borough for contamination. A strategy was submitted to the Department of the Environment, Transport and the Regions in July 2001. It detailed how the council would take a rational, ordered and efficient approach to this inspection. The council is the lead regulator on contaminated land but, wherever necessary, it will work in partnership with other organisations particularly the Environment Agency. This is the first revision of that strategy.

The council's priorities in dealing with contaminated land (including private and council owned land) are:

1. To ensure compliance and enforcement of law
2. To protect human health
3. To protect controlled waters
4. To protect designated ecosystems
5. To prevent damage to property
6. To prevent any further contamination of land
7. To encourage voluntary remediation
8. To encourage reuse of brownfield land

The initial five-year programme of inspection has come to an end. Progress through the strategy has been slower than anticipated due to the day-to-day pressures of dealing with potential brownfield sites being redeveloped through the planning process. A summary of the work carried out so far in relation to the Strategy is given in section 1.3.

It is recognised that some sites may be identified outside this general approach to inspection that will require urgent attention. These sites will be dealt with as they arise. The council will support parties wishing to undertake voluntary remediation and will encourage reuse of brownfield land for development in preference to greenfield development.

The regulations set clear criteria that must be met before land can be formally designated as contaminated. The council must also maintain a public register of information about all pieces of land that have been designated as contaminated. The expectations of some members of the public will not be met by the powers the council has under contaminated land legislation.

Chapter 1

Introduction

Basingstoke and Deane Borough Council is required to inspect land in its Borough for contamination under regulations that came into force on the 1st April 2000. This strategy details how this inspection has been undertaken so far and how it will continue in the future.

1.1 The council's aims

Contaminated land can pose a serious threat to health or the environment, including pollution of the water environment. But as well as direct health or environmental problems, land contamination can cause economic and financial damage. Uncertainties about remediation requirements and liability for them can cause blight, deterring development of land and adding to pressures on greenfield sites, and affecting urban regeneration. However there are very few cases where land cannot be restored to some beneficial use.

This Strategy aims to ensure land does not pose unacceptable risks to human health and the wider environment.

A key part of this work involves ensuring that all new housing developments are not built on land which may pose a significant risk to future occupiers health through the development control process.

The original strategy document was presented as a consultation draft and made available to all interested sections of the community, businesses and developers before being submitted to DEFRA. The revised strategy was produced following consultation with key stakeholders within the council.

1.2 Regulatory context

Contaminated land regulations have been under development since the early 1990's. Following consultation on a 1993 White Paper entitled "Paying for our Past", The Environment Act 1995 inserted a new section (Part IIA) into The Environmental Protection Act 1990. Another period of detailed consultation followed this enabling legislation, and the regulations and statutory guidance finally came into force in April 2000. The introduction of this new regulatory regime, generally referred to as Part IIA, led to the production of this Strategy and its review document.

1.2.1 The Roles Of The Borough Council And The Environment Agency

Local authorities have been given the primary regulatory role under the Part IIA regime as local authorities have historically had responsibility for dealing with any statutory nuisance caused by land contamination and are also the lead authorities on land use planning.

Local authorities have:

- To cause their areas to be inspected for contaminated land
- To determine whether any particular site meets the statutory definition of contaminated land
- To act as the enforcing authority for all contaminated land, unless the site meets the definition of a "special site" (in which case the Environment Agency will act as the enforcing authority).

The Environment Agency has a secondary regulatory role in assisting local authorities, providing site-specific local guidance, dealing with "special sites" (described in Appendix C – part 5) and publishing periodic reports on the state of land contamination nationally.

1.2.2 Defining Contaminated Land

A legal definition of contaminated land is given in Section 78A (2) of Part IIA of the Environmental Protection Act 1990.

Contaminated land is any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that:

- (a) significant harm is being caused or there is a significant possibility of such harm being caused; or
- (b) pollution of controlled waters is being, or is likely to be caused.

Section 78A (5) requires the regulatory authority to act in accordance with guidance issued by the Secretary of State in determining significance and likelihood.

As per Defra Circular 01/2006 – Where harm is attributable to radioactivity, the definition of contaminated land has been modified by regulation 4(a) of the modification Regulations as:

“any land which appears to the Local Authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that

- (a) Harm is being caused, or
- (b) there is a significant possibility of such harm being caused.

1.2.3 Dealing with Contaminated Land

If an area of contaminated land has been identified, the approach for dealing with it will be the same regardless of whether the local authority or the Environment Agency is the regulator. There are four main stages to this approach:

- i. To establish who is the "appropriate person" to bear responsibility for the remediation (or "cleanup") of the land.
- ii. To decide what remediation is required and to ensure that this occurs, through:
 - Reaching a voluntary agreement
 - Serving a remediation notice, if agreement cannot be reached
 - Carrying out work themselves, in certain circumstances.

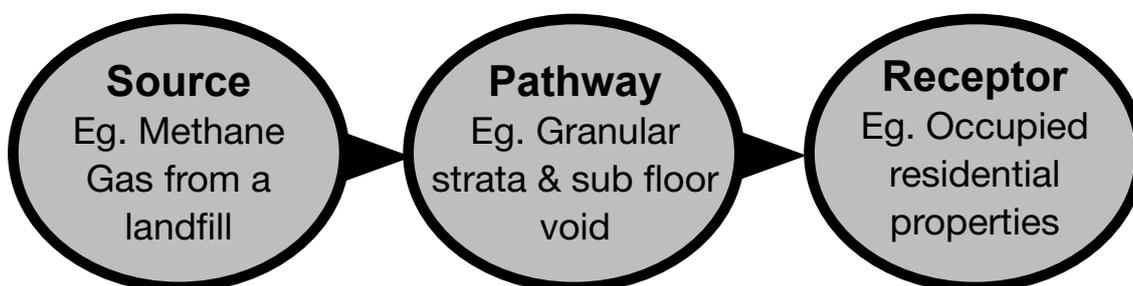
- iii. To determine who should bear what proportion of the liability for meeting the costs of the work.
- iv. To record certain information about regulatory action on a public register.

1.2.4 Pollutant Linkages and Risk Assessment

For a site to meet the definition of contaminated land, a pollutant linkage must be established. A pollutant linkage consists of three parts:

- i. A **source** of contamination in, on or under the ground
- ii. A **pathway** by which the contaminant is causing significant harm (or which presents a significant possibility of such harm being caused)
- iii. A **receptor** of a type specified in the regulations

Example:



The receptors recognised as being potentially sensitive are:

1. **Human beings**
2. **Ecological systems or living organisms forming part of a system within certain protected locations, including:**
 - Sites of Special Scientific Interest (SSSIs)
 - National Nature Reserves
 - Marine Nature Reserves
 - Nature Reserves
 - Special Areas of Conservation (SACs)
 - Special Protection Areas (SPAs)
 - Candidate SACs

- RAMSAR sites
 - Areas of special protection for birds
 - Sites of importance for Nature
 - Conservation (SINCs)
3. **Property in the form of buildings, including:**
- Ancient Monuments
 - Listed Buildings
 - Historic Parks and Gardens
4. **Property in other forms**
- Crops
 - Livestock
 - Home-grown produce
 - Owned or domesticated animals
 - Wild animals subject to shooting or fishing rights
5. **Controlled waters**
- Surface waters (e.g. rivers, lakes, streams)
 - Drinking water abstractions
 - Source protection zones
 - Groundwater – private abstractions
 - Groundwater – major aquifers

If the three components of the pollutant linkage exist, a risk assessment will be undertaken to determine the likelihood of harm being caused and the likely nature and extent of the harm caused if the predicted event actually occurred. An area of land can only be designated contaminated land if a significant risk has been proven.

1.3 Review of progress since 2001

Since the strategy was implemented in 2001 the data collection process has been completed. This has been achieved using a variety of sources including:

- Landmark data which is a dataset that can be purchased and has been compiled by scrutinising historic mapping to identify historic uses of land.
- Kelly Directories have been searched (these are trade directories that include businesses ranging from Boot Makers to Electricians).
- Environment Agency data on Landfill sites and Part A processes.
- Closer inspection of Historic Mapping of smaller scale maps has identified further historic uses.
- Hampshire County Council information on former landfill sites.

In 2001 the council purchased risk assessment software from Atkins Environmental Consultants. The software collates information pertaining to the type of contamination (hazard), the presence and type of receptors likely to be affected by the contamination. Following the input of site specific criteria the software carries out a risk assessment. The table below shows how the risk rating is formed:-

RISK RATINGS		Receptor Susceptibility			
		High	Upper/ Medium	Lower/ Medium	Lower
Source Hazard	High	7	6	5	4
	Upper/Medium	6	5	4	3
	Lower/Medium	5	4	3	2
	Lower	4	3	2	1

The risk relates to the sensitivity of the land use, for example houses with gardens are one of the most sensitive land uses whereas industrial land is low sensitivity. The source reflects the likelihood of that activity giving rise to contamination and the hazard of contaminants that may be present i.e. waste disposal is one of the highest risks whereas a cemetery is rated low risk.

Unfortunately after much work with this package it was shown to be inflammatory when setting out areas of land. Leading to an extremely large number of potentially contaminated sites highlighted which was not a true picture of the sources that had been found. As a result only the risk rating part of the software has been used as part of our current prioritisation.

Despite slower than expected progress through the strategy, remediation work through the planning process has been steady. Since 2005 a large number of sites have been remediated or are in the process of being remediated. The planning process will continue to play an important role in the remediation of brownfield land within the Borough in the future.

Chapter 2

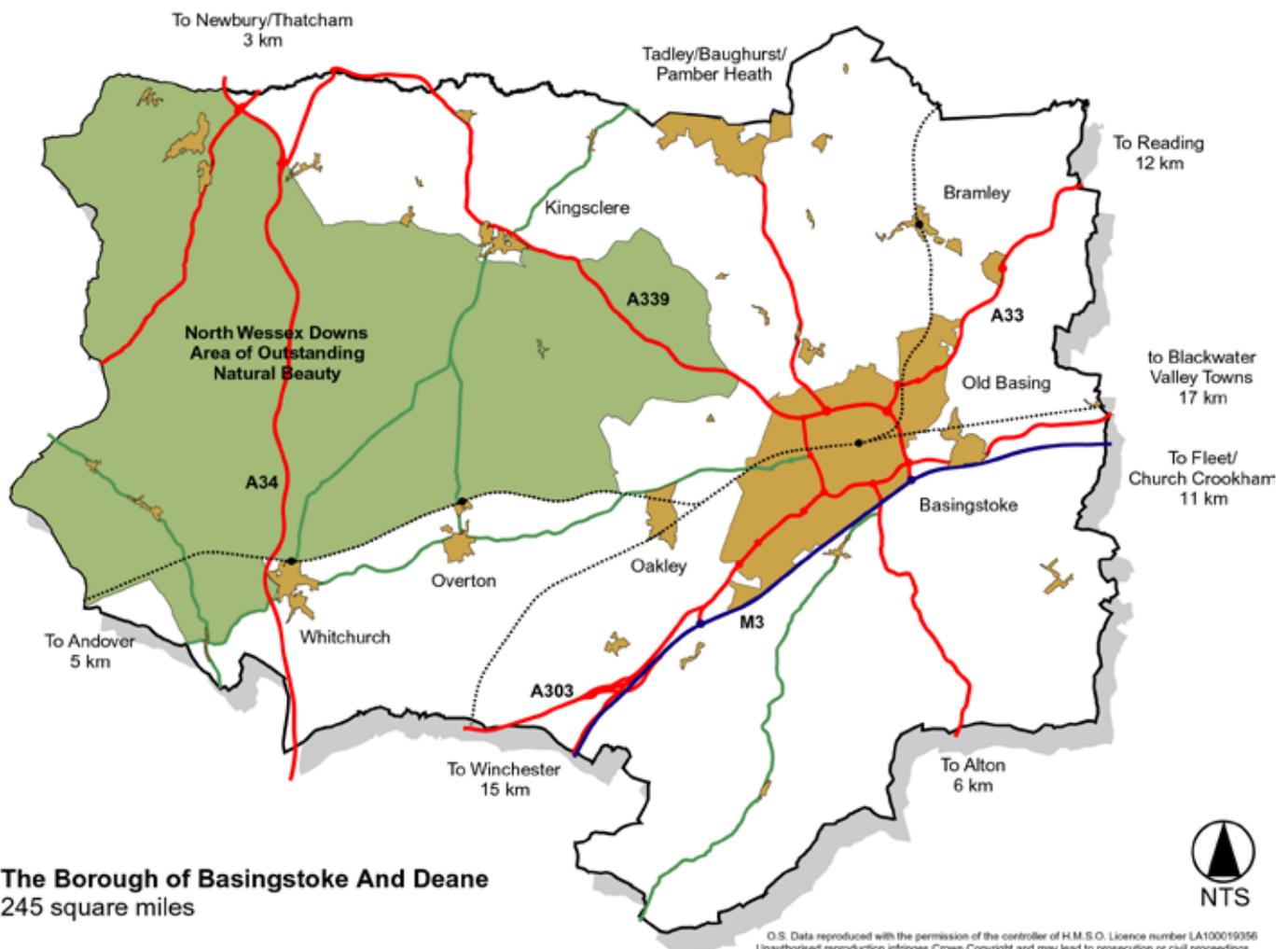
Characteristics of the Borough of Basingstoke and Deane

This section gives the background to the Borough of Basingstoke and Deane and an explanation of how this influences the Council's approach to inspection for contaminated land. It will also enable fair comparison with other authorities.

2.1 Geographical location

Basingstoke, the commercial hub of North Hampshire, and Deane, a tiny hamlet consisting of no more than a dozen houses, sum up the contrast of town and country in this North Hampshire Borough.

Map 1 : Towns and Villages Network with Major Traffic Routes



2.2 Brief description / history

Once a sleepy market town with a population of about 25,000, Basingstoke has expanded to become a successful and outgoing commercial centre.

Major expansion initially came about as a result of the Basingstoke Town Development Agreement. This was drawn up in 1961 to relieve pressure on the London area and provide Londoners with better opportunities for housing, education, employment and recreation. It totally transformed the town, resulting in a completely revised road network, a new pedestrianised town centre, large new employment areas, schools and health-care facilities, and the building of around 8,000 new rented homes to accommodate workers and their families moving out of London. Since the termination of the Agreement in 1977, commercial enterprise, excellent communication links by modern road and rail systems to London and elsewhere, the availability of serviced development sites, and attractive countryside are some of the factors that have influenced the Borough's continued expansion.

Other parts of the borough also experienced significant growth from the middle of the last century, particularly in the Baughurst/Tadley area, with the development of the Atomic Weapons Establishment at Aldermaston.

Since 1961 well over 49,000 additional new homes have been completed in the borough as a whole. Over more recent decades the majority of new housing has been provided by the private sector, mainly for owner-occupation, although under current policies a minimum of 40% affordable housing is sought on most sites.

The Borough is set in an extensive rural area and many of the small, attractive villages and hamlets have designated Conservation Areas. The area also contains a wealth of archaeological evidence, listed buildings and many particular locations of nature conservation value.

For the most part, this is prosperous farming countryside with a wide range of mixed farms. In the southern and western parts of the Borough, the land, which is agriculturally productive, is rolling with chalky soil from which rise the rivers Test and Loddon. The northern part of the Borough is an attractive combination of open downland, productive agricultural land and extensive areas of woodland with many streams and hedgerows. The north western part of this area forms part of the North Wessex Downs Area of Outstanding Natural Beauty.

Although small settlements, Kingsclere, Whitchurch and Overton were of importance during the medieval period. Kingsclere, as its name implies, was a royal residence, whilst Whitchurch and Overton grew up beside the River Test and depended upon its water for the operation of machinery. There is still an important paper mill at Overton and a silk mill at Whitchurch.

2.3 Size

The Borough of Basingstoke and Deane covers an area of about 245 square miles. It reaches from the Berkshire county boundary in the north to the Candovers in the south and as far west as the outskirts of Newbury and Andover.

2.4 Population distribution

As at 2010, the population of the Borough is estimated to exceed 164,000.

The largest settlement within the Borough is Basingstoke Town, covering an area stretching from Kempshott Park in the south west to Sherfield Park in the north east, with a population of around 100,000.

Tadley, including the built-up parts of Pamber Heath and Baughurst, is the second largest settlement in the Borough with a population of around 16,600.

The settlements of Old Basing, Kingsclere, Whitchurch, Bramley, Oakley and Overton have populations of between 3,300 and 5,300.

2.5 Land owned by the borough council

Land owned by the Borough Council can be categorised as follows:

Parks and Open Spaces	1380 acres	558 hectares
Industrial and Commercial	421 acres	170 hectares
Town Centre Retail	24.5 acres	10 hectares
Agricultural	2058 acres	833 hectares

The total area of the Borough equates to approximately 63455 hectares. Therefore the Council owns approximately 2.5% of the total area.

2.6 Current land use characteristics

The main use of land in the district is for agriculture, with approximately 77.4% of land used for this purpose (source: The Hampshire Farming Study 1995). Approximately 5% of the land is for residential use with less than 1% for commercial/industrial use.

In summary, 93% of the district is countryside and 7% is defined as built up area.

2.7 Protected locations

The biodiversity of the Borough is one of its major natural assets. The Borough boasts:

- An Area of Outstanding Natural Beauty (AONB)
- Special Areas of Conservation (c. SAC's)
- National Nature Reserves (NNR's)
- Sites of Special Scientific Interest (SSSI's)
- Sites of Importance for Nature Conservation (SINC's)

2.8 Key property types

As well as its rich natural environment, the Borough has a rich historic environment with 1880 Listed Buildings, 63 Ancient Monuments and 47 designated Conservation Areas.

2.9 Key water resource / protection issues

The water companies Thames Water and South East Water supply the majority of the Borough's drinking water. The Borough Council regularly monitors the quality of private drinking water supplies in its area.

2.10 Known information on contamination

The Environmental Protection Team already:

- (a) Collate information on a number of potentially contaminated sites based on its former land use. This information is held in a 'Historical Land Use' database.
- (b) In addition, a separate database is held detailing those sites which have undergone:
 - i. A site investigation* and/or
 - ii. Remediation*.

** These are normally the result of a Planning Application for the development of land where past use may have resulted in contamination. If development proceeds on these sites, remedial works will often have been carried out to improve site conditions. Planning records will therefore form a valuable resource during the investigation process.*

2.11 Current and past industrial history

The Borough of Basingstoke and Deane has never been a major industrial area. Until the 1960's the predominant source of employment has been agricultural. Any industrial sites were of a small to medium scale with no particular industry dominant.

The Borough has had a mixed pattern of industry, including the Thornycroft engineering works, clothing manufacturers, timber treatment yards, an iron foundry, papermill, gas works and scrap yards. Areas of land were also used for military purposes and these will need to be addressed as part of our strategy.

Today, the Borough is a busy commercial centre with companies such as the AA, Sony, Motorola, and Barclays Mercantile all established in Basingstoke. Outside of Basingstoke Town the major sources of employment are focused in Overton (De la Rue), Whitchurch (Ardglen Industrial Estate), Kingsclere (Kingsclere Park Industrial Estate), Bramley (Campbell Court) and Tadley.

The excellent communications links have helped to ensure the Borough's success.

The table below shows the employment structure for the Borough:

Employment Structure

Sector	1996		2001	
	Employees	%	Employees	%
Agriculture, Forestry, energy and water supply	800	1.3	2,200	2.7
Manufacturing and minerals	11,400	17.9	12,600	15
Construction	1,900	3.0	5,700	6.9
Distribution and catering	16,000	25.1	16,400	19.8
Transport and communication	2,100	3.3	6,900	8.3
Finance and business services	16,400	25.7	19,500	23.5
Other services	15,200	23.8	19,500	23.5
Total (excluding self employed)	63,800	100.1	82,800	99.7

Source: Annual Employment Survey 1996/2001 Census, Industry of Employment, Office for National Statistics Note: All figures rounded to nearest 100. Percentages do not total 100% due to rounding. Excludes self employed

2.12 Broad geological characteristics

There are four major elements to the geology of the Borough. These are the structure of the rocks, the Cretaceous strata, the Tertiary strata and the Quaternary strata.

Structurally the Borough encompasses the generally gentle southward dipping Chalk that make up the Hampshire Downs with, to the north and northeast, the gently northerly dipping Palaeogene (Tertiary) strata within the London Basin Syncline. The boundary between the older Chalk and younger Palaeogene strata run roughly WNW to ESE across the Borough from Highclere to Greywell. This simple picture is somewhat complicated by the Kingsclere anticline structure in the northwest of the Borough that brings the Upper Greensand to the surface in the core of that eroded anticline. Other small anticlinal and synclinal elements to the structure of the district are not so readily obvious from the published maps

but these change the dip of the beds subtly across the whole area. The majority of these structural elements are roughly aligned east-west; the anticlines generally have slightly steeper dips on their northern limbs.

The Cretaceous strata are represented principally by the Chalk, with the inlier of Upper Greensand within the core of the Kingsclere anticline. The Upper Greensand is essentially a very fine sandy, glauconitic siltstone, with thin lime stones and is approximately 40-45m thick. This is overlain by the Chalk which attains thicknesses in the order of 400m or so. The Chalk is traditionally divided into three parts, the Lower Middle and Upper Chalks, and these are shown on the older surveys. The Chalk is between 100 and 65 million years in age but the youngest beds are missing in this area. The more modern interpretation based on research done within the 1970's and 1980's divides the Chalk Group into two subgroups (the Grey Chalk Subgroup overlain by the White Chalk Subgroup) which are themselves divided into Formations. Additional Formations are present outside the Borough but have been removed by pre-Palaeogene erosion. A summary of these terms is given in the table below.

CHALK GROUP	White Chalk Subgroup	Culver Chalk Formation
		Newhaven Chalk Formation
		Seaford Chalk Formation
		Lewes Nodular Chalk Formation
		New Pit Chalk Formation
		Holywell Nodular Chalk Formation
	Grey Chalk Subgroup	Zig Zag Chalk Formation
		West Melbury Marly Chalk Formation

Essentially the Grey Chalk Subgroup comprises flint-free, grey, marly chalks and thin limestones becoming less marly upwards. The White Chalk Subgroup is essentially firm, white flint-rich chalks with notable hard nodular beds. The division of this subgroup into its component formations is based on the relative proportions/incidence of flint seams, marl seams and characteristic harder nodular beds. As a whole the chalk also contains many well preserved fossils and the upward change in the species is utilised to further divide the Chalk Group.

The Palaeogene strata is represented by a maximum of about 190m of beds which were traditionally divided (from oldest to youngest) into the Woolwich and Reading Beds, the London Clay, the Bagshot Beds and the Bracklesham Beds. They are between 65 and 44 million years in age. A more modern interpretation is shown in the table below:

Bracklesham Group	Camberley Sand Formation	Sand, fine-grained locally glauconitic, yellow-brown, with thin clay lenses and flint pebble beds near base
	Windlesham Formation	Sand and clay, highly glauconitic, dark green and brown, with discontinuous flint pebble bed at base
	Bagshot Formation	Sand, fine- to medium-grained, yellow-brown, with thin silt and clay laminae: flint pebble bed at base
Thames Group	London Clay Formation	Clay and silty clay, grey-blue, with subordinate sands, silts and flint pebble beds, variably glauconitic and shelly
	Harwich Formation	Sand and clay, glauconitic and shelly, pebbly at base
Lambeth Group	Reading Formation	Clay, colour-mottled red, grey, orange and brown, with sand beds
	Upnor Formation	Sand and clay, highly glauconitic, locally shelly: nodular glauconite-coated flints at base

The Quaternary strata are of a much younger age (usually considered as being less than 2 million years old). The strata rest unconformably upon all of the older 'solid' strata. In the area of the Borough, the Quaternary strata can be crudely divided into those deposits derived from the degradation of the Palaeogene cover (and from later periglacial activity upon those sediments) and those sediments derived from the fluvial activity of the major rivers. The clay-with-flints (and associated periglacial slope deposits topographically below) occur principally on the Chalk, whilst the fluvialite deposits are principally associated with the Rivers Kennet and Loddon and their tributaries in the north of the Borough.

The clay-with-flints is widespread on the Chalk and comprises red-brown unctious clay packed with angular, nodular and well-rounded flints. Later degradation of the clay-with-flints gives rise to a similar deposit downslope but this 'older head' generally contains more sand and broken angular flint debris.

The fluvialite deposits are essentially sand and gravels with varying proportions of these two constituents together with clay. Generally the older the deposits (this means in most cases those higher topographically) are more clayey than the younger, lower, deposits. Within the confines of the present day flood-plains these gravelly deposits are covered by Alluvium which comprises silty sandy clays, gravel 'stingers' and peats.

2.13 Broad hydrogeological characteristics

The Borough of Basingstoke and Deane has a number of rivers of a high quality. The River Test to the south of the Borough and the Rivers Loddon and Lyde to the east, are famous for their trout fishing and watercress growing. The River Enborne lies to the North of the Borough.

From sampling carried out by the Environment Agency, the river quality of the Test, Lyde and the Loddon is predominantly categorised as "very good" or "good". Protection of these high standards of river quality from contamination is therefore a major objective of the inspection strategy.

The National Rivers Authority Groundwater Vulnerability Map provides information on the water beneath the land in the Borough.

Areas of chalk are classed as a major Aquifer of high vulnerability. Major Aquifers are highly permeable formations usually with a known or probable presence of fracturing. They may be highly productive and able to support large abstractions for public supplies and other purposes.

The Bracklesham Beds are classed as a minor aquifer and the London Clay a non-aquifer.

Within the borough boundaries there are areas of protected groundwater where important abstractions occur. The Environment Agency term such areas "source protection zones (SPZ)". Within the Borough there are 11 SPZ 1 (inner protection zone) which are the most sensitive areas, followed by 15 SPZ 2 (outer protection zones) and 10 SPZ 3 (total catchments).

Chapter 3

The Basingstoke and Deane Borough Council Strategy:

Overall aims

The reasons for writing this strategy were described in Section 1.3. A detailed breakdown of how the Council will meet its objectives is given in this section, prioritising actions and laying down milestones.

3.1 The council's priorities

Dealing with contaminated land constantly throws up complex issues, often where limited amounts of information are available. For each site, the importance of these issues must be balanced in order to move forward in dealing with the problem. A prioritised list of the Council's aims has therefore been devised to aid decision-making.

The Council's priorities in dealing with contaminated land will be:

- 1 To ensure compliance with and enforcement of statutes
- 2 To protect human health
- 3 To protect controlled waters
- 4 To protect designated ecosystems
- 5 To prevent damage to property
- 6 To prevent any further contamination of land
- 7 To encourage voluntary remediation
- 8 To encourage re-use of brownfield land

This list is presented in priority order and in all cases will have regard to significance and likelihood, as required by the regulations.

It should be emphasised that only a small proportion of sites subject potentially to contaminated land use will meet the strict definition of contaminated land. Due to the past uses of the land, many of these sites will contain substances in, on, or under the ground, which have the potential to cause harm. However, in order to be designated as contaminated land these sites must have both a pathway by which significant harm may be caused and a receptor on which significant harm can be inflicted. If either the pathway or the receptor is missing from the pollutant linkage, the site may be land in a contaminative state but cannot be designated as contaminated land.

3.2 Work programme

The new work programme is listed below:

Stage 1 – Initial prioritisation of sites

This includes using the risk rating assigned to parcels of land within the Atkins software to create an initial prioritisation of sites into 7 risk categories. The Table shown in section 1.3 illustrates how this is formulated. This way of prioritising will however leave large numbers of sites with the same risk score so further work will need to be done to subdivide these categories (see stage 2). These sites will then be subject to a brief site overview of each site to see if the risk category given is rational and make any necessary changes as seen fit. A brief justification should be included with all changes in risk score. Once this is complete we estimate that there will be no more than 150 sites highest risk category.

Stage 2 – Detailed prioritisation of sites

Starting with those sites that were assigned the highest risk score of 7 a further risk assessment will be carried out in order to assign an individual risk score. At this time we are researching several possible risk assessment methodologies that will rank the sites in priority order. This will then enable us to move forward with the detailed assessment of sites one by one dealing with the highest priority sites first.

Stage 3 – Detailed assessment of highest priority sites

A detailed assessment shall be carried out of the highest ranking sites. This will include a site walkover, to look for any signs of contamination and a field assessment of the possible sources, pathways and receptors that may be present. A short desk study shall also be written including all internal information about the site from planning, building control, property services etc. Including current and historic maps if available. Information from the Environment Agency and other external bodies should also be included. If information comes to light that changes the risk of the site this can be changed within the model and reprioritised.

Stage 4 – Intrusive investigation

An intrusive investigation of a site will only take place if it is deemed to pose a significant risk to receptors on site. The local authority will organise and carry out any necessary investigation on site. The local authority will ensure that the relevant risks are being adequately investigated to decide if remediation is required.

Stage 5 – Determination of Contaminated Land

If after carrying out an intrusive investigation on a piece of land the risks meet within the definitions set out within Part IIA the land will be designated as contaminated land. The Council will then follow the procedures set out in Appendix C. If the investigation proves that there are no risks to the receptors on that site then the process will start over again from stage 3 until all potentially contaminated sites have been proved to be of no risk.

Inspection timetable

Activity	Time-period
Stage 1 – Initial prioritisation of sites	April 2011 - Dec 2011
Stage 2 – Detailed prioritisation of sites	Dec 2011 - May 2012
Stage 3 – Detailed assessment of highest priority sites	May 2012 onwards
Stage 4 – Intrusive investigation	May 2012 onwards
Stage 5 – Determination of Contaminated Land	As appropriate

The strategy will be reviewed in 2015.

Chapter 4

Procedures

Procedures have been drawn up to describe how contaminated land issues will be handled within the Council. This section also details the level of service the business community and members of public can expect from the Council in dealing with these issues.

4.1 Internal management arrangements for inspection and identification

Within the Borough Council, the Environmental Protection Team has responsibility for the implementation of Part IIA of the Environmental Protection Act 1990. As part of Environmental Care Business Unit the Environmental Protection Manager is the lead officer on Contaminated Land, reporting to the Head of Environmental Care.

In January 2005 a Contaminated Land Officer was employed to deal with the day-to-day implementation of the strategy. The Contaminated Land Officer is responsible for serving remediation notices, subject to consultation with the Environmental Protection Manager, Head of Environmental Care and the Council's solicitor.

Elected members will be informed at the earliest opportunity of any plans to designate an area of Council-owned land, or land where the Council is the "appropriate" person and may be liable for remediation costs.

4.2 Considering local authority interests in land

As indicated in Section 3, investigation of Council-owned land will be carried out alongside the settlement-by-settlement inspection schedule, and this land will be amongst the first investigated in each area.

4.3 Information collection

Many sources of information will be required to identify potential sources of contamination and potential receptors. Some of the resources are detailed below:

Resource	Borough Specific	Use
Historic maps	Digital maps purchased from Ordnance Survey and OS maps held by Library	To identify sources
Historic land use database	GIS system, identifying potentially contaminative land use	To identify sources
Geological maps	1:50 000 solid and drift geology maps from the British Geological Society E216)	To characterise sources and pathways
Kelly's Trade Directories	These are held on microfiche by the local Library and date from 1937-1974	To identify previous contaminative uses
Hydrogeological maps	The Groundwater Vulnerability Maps Produced by the Environment Agency	To identify receptors (controlled waters)
Maps	Produced by the Environment Agency will be used to assess the potential for contamination of groundwater	Environment Agency to identify receptors (control of waters)
Source Protection Zones	Areas of groundwater that receive special protection by the Environment Agency are identified on the EA website, and can be used with a GIS	To characterise receptors (controlled waters)
Environmental Health records	The Borough Council maintains records to identify known complaints and investigations	To identify known information on contamination
Planning records	The Borough Council holds detailed planning records of development in the area, including information on ground condition presented in surveys	To help identify former uses of the land

Resource	Borough Specific	Use
Local Development Framework	The LDF is currently under production	To identify potential future receptors
Integrated Pollution Control Register	The Council has maintained a public register containing details of authorised industrial processes in the Borough since 1990	To identify sources of contamination
Waste Management Licences	The Environment Agency maintain a register of sites licensed for waste management activities and have provided relevant information relating to sites in the Borough	To identify sources public of contamination
Register of closed landfill sites	The Environment Agency will provide a register of closed landfill sites.	To identify known information on contamination
The County Archive	The County Archivist has identified a number of sources describing land-use of essential for researching site histories prior to the end of the Second World War when the Town & Country Planning legislation came into force.	To identify sources contamination in the Borough
Property Services records	The Borough Council holds records of previous land uses and lessee details for Council owned land	To identify previous land uses and leaseholders details.
Building Control Records	The Borough Council holds records of previous site investigations which may have been carried out at the time of development	To identify any sites which have been remediated and are no longer 'contaminated'.

4.4 Information management

The Council's Geographical Information System (or GIS) is the primary tool used to manage contaminated land information.

The GIS system is used to correlate all information and determine the proximity of potential receptors (residents, controlled waters) to sources of contamination. The GIS is linked to an Access database, which allows statistical information to be drawn together for reporting and monitoring.

4.5 Complaints and voluntary information provision

From time to time, the Council may receive a complaint regarding contaminated land from a member of the public, business or community group. Interested residents may also voluntarily supply information relating to land contamination that is not directly affecting themselves, their families or their property. These complaints or acts of information provision may impact on the approach to inspection and so the procedures to be adopted are detailed here.

4.5.1 Complaints

A complaint regarding contaminated land will be dealt with by the Environmental Protection team.

All complainants may expect:

- their complaint to be logged and recorded
- to be contacted by an officer regarding their complaint within three working days of receipt
- to be kept informed of progress towards resolution of the problem.

Where the Contaminated Land Officer is of the opinion that there is a potential imminent risk to public health, a detailed evaluation of all the site information available will be completed within 5 working days and an action plan agreed with the Environmental Protection Manager. Otherwise, the evaluation will be completed within 10 working days.

Once an action plan has been agreed, the complainant and the owner of the land will be notified in writing. The action plan will be reviewed every time new information becomes available. When appropriate, the Environment Agency will be involved in preparing an action plan.

Every effort will be made to resolve complaints quickly and efficiently. The legislative framework does, however, present a number of obstacles to speedy resolution of problems:

- i. Proof of a viable pollutant linkage before any formal designation as contaminated land is permissible, which might only be possible with detailed investigation
- ii. Prior consultation with interested parties before designation as contaminated land
- iii. A minimum of a three-month period between designation and serving of a remediation notice
- iv. The requirement for the enforcing authority to make every effort to identify the original polluter of the land (or "Class A" person).

The regulations allow conditions (ii) and (iii) to be waived in extreme cases, but not conditions (i) and (iv).

4.5.2 Confidentiality

All complainants will be asked to supply their names and addresses and, if appropriate, the address giving rise to the complaint. The identity of the complainant will remain confidential. The only circumstance in which this information might be made public would be in the case of a remediation notice being appealed in a court of law and an adverse effect on the complainant's health was an important reason for the original contaminated land designation.

4.5.3 Voluntary Provision of Information

If a person or organisation provides information relating to contaminated land that is not directly affecting their own health, the health of their families or their property, this will not be treated as a complaint. The information will be recorded and may be acted upon. There will, however, be no obligation for the Council to keep the person or organisation informed of progress towards resolution, although it may choose to do so as general good practice.

4.5.4 Anonymously Supplied Information

The Council does not normally undertake any investigation based on anonymously supplied information, and this general policy will be adopted for contaminated land issues. This policy does not, however, preclude investigation of an anonymous complaint in exceptional circumstances.

4.5.5 Release of Information

The release of information on potentially or actually contaminated land is a difficult issue as it can cause property blight if handled in an uncontrolled manner. The council is committed to openness in relation to all information provided that this information shall be provided to an appropriate person for a proper purpose.

We will continue to respond to specific written requests for information held by the council on historic land uses and investigation data. A disclaimer is added to the written response making it clear that the information provided is only that which is available to the Department at that time and encouraging the requestor to make more extensive enquiries. An appropriate charge is made for the provision of this information. This is consistent with the Environmental Information Regulations and the Freedom of Information Act.

4.5.6 Anecdotal Evidence

Any anecdotal evidence provided to the Council relating to contaminated land will be noted, but no designation of contaminated land will occur without robust scientific evidence. In all cases, the Contaminated Land Officer will use knowledge and experience to decide what, if any, further investigation is required following a complaint or a provision of information.

4.6 Risk assessment

All information on substances in, on or under the ground that may cause significant harm or pollution will be evaluated against current governmental guidelines.

4.6.1 CLEA and ICRCL Guidelines

The Contaminated Land Exposure Assessment or CLEA guidelines were released by DEFRA in 2001. Before these guidelines were available the guidelines issued by the Interdepartmental Committee on Redevelopment of Contaminated Land (ICRCL) were used. These were withdrawn in December 2003 and should no longer be used to evaluate site investigation data. The Government have recently released a document for consultation titled The Way Forward this details numerous changes to the way that contaminated land will be determined and remediated in the future. The consultation deadline has closed and no definitive document has been released yet but the council will follow any updated guidelines when risk assessing and determining contaminated land.

4.6.2 Risk Assessment for Other Substances

Risk assessments may also be required for substances not covered by the CLEA guidelines. In these cases, reference may be made to occupational exposure levels issued by the Health and Safety Executive or other authoritative sources of information, such as guidelines adopted in other countries. If guidelines from other countries are referred to, it will be important to bear in mind the significant difference in remediation standards between the UK and these other countries. The Environment Agency has also released risk assessment software CLEA UK which can be used to derive site specific exposure levels although great care should be taken in the interpretation of the results.

4.6.3 Risk Assessment for Radioactive Contaminated Land

In August 2006 new legislation to facilitate the remediation of radioactive contaminated land was brought in and amendments made to the Part IIA legislation. The council is the lead authority in identifying possible sites. The Environment Agency will then take the lead on any determination or remediation that follows.

4.6.4 Risk Assessment for Controlled Waters

Advice will be sought from the Environment Agency on risk assessment if controlled waters are the receptor in a particular pollutant linkage. It is anticipated that risk assessments and remediation will be carried out in accordance with Environment Agency guidance as laid down in "Methodology for the Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources" (EA R&D Publication 20, 1999).

4.7 Interaction with other regulatory regimes

There are other regulatory actions that can be taken to deal with contamination on land. Overlaps with planning, water pollution and IPPC legislation are considered the most important and are addressed here.

4.7.1 Planning

The vast majority of contaminated land issues are currently addressed through the planning regime, where contamination is a material consideration. While the introduction of Part IIA will undoubtedly lead to the problems of additional sites being addressed, it is anticipated that redevelopment of brownfield sites, and the associated planning controls, will remain the primary mechanism for dealing with contaminated land. Any remediation agreed as a planning condition will be dealt with under planning controls and not under Part IIA.

The Environmental Protection Team currently works closely with the Planning and Building Control Department on all issues relating to pollution and the current arrangements for inter-departmental consultation are believed to be sufficiently robust to encompass contaminated land issues.

Appendix B details the approach taken to dealing with contaminated land under Planning and Building Regulation controls.

4.7.2 Water Pollution

The Water Resources Act 1991 gives the Environment Agency powers to deal with harm to controlled waters being caused by contaminated land. While Part IIA legislation does not revoke these powers, such problems should be dealt with under the new contaminated land regime. The following steps will be taken:

The Council will consult with the Environment Agency before designating any contaminated land as a result of risk to controlled waters and will take into account any comments made with respect to remediation.

If the Agency identifies a risk to controlled waters from contaminated land, the Council will be notified to enable designation of the land, and remedial action will be taken under Part IIA.

4.7.3 Environmental Permitting

Certain industrial activities/operations require an Environmental Permit to operate. These activities are defined in Regulations but fall into the following broad categories:

- burning fuel, gasification, liquification and refining activities
- manufacturing and processing metals
- manufacturing lime, cement, ceramics or glass
- manufacturing chemicals, pharmaceuticals or explosives, storing chemicals in bulk
- incinerating waste, operating landfills, recovering waste
- using solvents
- intensive pig and poultry farming.

These activities are split into three categories according to their environmental impact and type of permit they need: part A(1), part A(2) and part B:

- Part A permits control activities with a range of environmental impacts, including emissions to air, land and water.
- Part B permits control activities which cause emissions to air.

A contaminated land assessment must be undertaken and submitted with any application for a new A1 or A2 Permit. These are reviewed by the Environment Agency and the Council. If the site condition is found to meet the definition of contaminated land this may trigger action under Part IIA. When such an operation ceases trading a further site assessment must be carried out to ensure the land has not been contaminated.

Chapter 5

Liaison and communication

Much of the work proposed in this strategy will be collaborative and require effective liaison with other bodies.

5.1 Statutory consultees

Contacts have already been established with officers of all statutory consultees.

Statutory consultees for the Contaminated Land Inspection Strategy are:

- Environment Agency
- English Nature
- English Heritage
- Ministry of Agriculture, Fisheries and Food
- Food Standards Agency
- Hampshire County Council

5.2 Non-statutory consultees

There is great scope for members of the public, businesses and voluntary organisations to play an important role in dealing with contaminated land in the Borough. Efforts will be made to encourage participation in the process of identifying and investigating contaminated land, recognising the valuable contribution of these sectors.

5.3 Communicating with owners occupiers and other interested parties

The council's approach to its regulatory duties is to seek voluntary action before taking enforcement action. This approach will be adopted for issues of land contamination, recognising that in many cases as much or more effective remediation can be achieved by agreement than by enforcement. The regulations provide an incentive to undertake voluntary action, in that any materials that require disposal as a result of voluntary remediation will be exempt from landfill taxes. This exemption does not apply to materials generated as a result of a remediation notice having been served.

This approach requires effective communication with owners, occupiers and other interested parties. Contaminated Land Officer will be the central contact point within the authority on contaminated land issues and as such will work to keep owners, occupiers and other interested parties informed at each stage of an investigation, regardless of whether there is a formal designation of contaminated land.

Designating an area of contaminated land

Where a formal designation of contaminated land is required this will be conducted in accordance with the guidance contained within the Department of the Environment, Farming and Rural Affairs Circular 01/2006 - Contaminated Land. Annex 3 summarises DEFRA's guidance.

In summary the following actions will be undertaken before designating an area of contaminated land:

Where a formal designation of contaminated land is required, the following actions will be undertaken:

- Write to the owner and / or the occupier of the land at least 5 working days prior to designation, explaining in summary the reason for designation
- Write to the owner and / or the occupier explaining the land has been designated as contaminated land and seeking appropriate remediation without service of a notice
- If requested, dispatch a copy of the written risk assessment to the owner and / or occupier of the land within 5 working days of receipt of a request

- Write to the owner / occupier of neighbouring properties and / or the complainant within 5 working days of designation.

Serving a remediation notice

- Remediation notices shall be served in accordance with guidance contained within DEFRA's Circular 01/2006 – Contaminated Land. Annex 2 summarises DEFRA's guidance.
- Provide a written remediation notice to the owner / occupier specifying action required
- Write to the owner / occupier of neighbouring properties and / or the complainant within 5 working days of notice being served.

Should an urgent designation of contaminated land be required, these steps will be observed as far as practicable, although some deviation from the timescales specified is to be expected.

5.4 Powers of entry

Under Section 108(6) of the Environment Act 1995, the Council has been granted powers of entry to carry out investigation. At least seven days notice will be given of proposed entry onto any premises, unless there is an immediate risk to human health or the environment.

5.5 Enforcement action

The Council has a General Enforcement Policy to ensure consistent, fair, and transparent practices are used when taking enforcement action. Contaminated land investigations will be carried out in accordance with this Council-wide policy.

5.6 Risk communication

The complex nature of contaminated land issues does not lend themselves to easy explanation to the layperson. Development of effective methods of risk communication is therefore essential.

The Council will treat any concerns raised by a member of the public seriously and with respect, recognising the importance of the issue to the individual. In all instances, the Council will recognise and try to overcome the critical barriers to effective risk communication:

- familiarity – increased concern about unfamiliar issues
- control – increased concern if the individual is unable to exert any control over events
- proximity in space – increased concern about nearby events
- proximity in time – increased concern about immediate consequences rather than long term effects
- scale – particularly in terms of media coverage, where one large incident appears much worse than several small incidents
- "dread factor" – lack of understanding can lead to stress and make further explanation more difficult

These regulations grant only limited powers to local authorities to deal with materials present in, on or under the ground. Many members of the public believe that any material that is not naturally present in the ground should be removed, especially if it is in the vicinity of their own home. It will be critical to explain this can only be done where this is a risk of significant harm, and it is to be expected that some members of the public will have difficulty accepting this.

It is important to appreciate that the expectations of some members of the public will not be met by the powers local authorities may exercise under contaminated land legislation.

5.7 The public register

Under the regulations, the Council is required to maintain a public Contaminated Land Register. The register will be held at the Council's principal office in Basingstoke. The register will be accessible on request by members of the public during office hours, Monday to Friday. A copy of the register is also available on the Council's website at www.basingstoke.gov.uk.

The regulations clearly specify the information that can be recorded on this register. This register will therefore include:

- remediation notices
- details of site reports obtained by the authority relating to remediation notices
- remediation declarations, remediation statements and notifications of claimed remediation
- designation of sites as "special sites"
- any appeals lodged against remediation and charging notices
- convictions.

The public register will not include details of historic land use and other records used in the investigation of potentially contaminated land. These are research documents and as such will not be made available to the public.

5.8 Provision of information to the environment agency

The Environment Agency is required to prepare an Annual Report for the Secretary of State on the state of contaminated land in England and Wales. This report will include:

- A summary of local authority inspection strategies, including progress against the strategy and its effectiveness
- The amount of contaminated land and the nature of the contamination
- Measures taken to remediate land.

As local authorities are the lead regulators on contaminated land, with the Environment Agency regulating only some categories of sites, the national survey will clearly be reliant on information provided by local authorities. A memorandum of understanding has been drawn up between the Environment Agency and the Local Government Association that describes how information will be exchanged between the local authority and the Environment Agency. The Council will therefore provide information to the Environment Agency following the guidelines agreed through this national forum.

The local authority must also provide information to the Environment Agency whenever a site is designated as contaminated land, and whenever a remediation notice, statement or declaration is issued or agreed. The Environment Agency has provided standard forms allowing this information to be provided in a consistent format and the Council will adopt these to fulfil its reporting requirements.

Chapter 6

Review mechanisms

This strategy outlines the general approach to be taken in inspecting land in the Borough for contamination. This section will describe instances when inspections will occur outside this general inspection framework, circumstances under which previous inspection decisions should be reviewed and measures to be taken to ensure the strategy remains effective and up-to-date.

6.1 Triggers for undertaking inspection

The strategy has already recognised there may be occasions where inspections may have to be carried out outside of the general inspection framework.

Triggers for undertaking non-routine inspection will include:

- Unplanned events – e.g. if an incident such as a spill has occurred
- Introduction of new receptors – e.g. if housing is to be built on a potentially contaminated site, designation of a new protected ecosystem, persistent trespass onto a site by young people
- Supporting voluntary remediation – e.g. a potentially liable party wishing to undertake clean-up before their land has been inspected by the local authority
- Identification of localised health effects which appear to relate to a particular area of land
- Responding to information from other statutory bodies, owners, occupiers, or other interested parties

While these occurrences may trigger non-routine inspections, if this strategy is to prove effective, they must not be allowed to significantly interfere with the milestones laid down in the general inspection framework. It will be important to consider this issue in all strategy reviews.

6.2 Triggers for reviewing inspection decisions

In addition there may be occasions where the findings of previous inspection decisions should be reviewed. This might occur, for example, if there were:

- Significant changes in legislation
- Establishment of significant case law or other precedent
- Revision of guideline values for exposure assessment.

It is important therefore that all decisions are made and recorded in a consistent manner that will allow efficient review.

6.3 Reviewing the strategy

As part of the overall quality management of this work, it is important to consider the need to review the strategy from time to time. This strategy will next be reviewed in 2015.

Appendix A

Works maintenance contracts property transfers and leasing property

1 Works/Maintenance Contracts

- 1.1 As a land holder the Borough Council awards contracts for major new works projects and maintenance works each year. Where such works are taking place on contaminated land or potentially contaminated land the Borough Council has a duty of care to provide the fullest information possible to contractors including access to any relevant site investigation reports. The contractor will then be in a position to comply with:
- (a) relevant health and safety legislation/guidance, including the Construction Design and Management Regulations (Note: the CDM Regulations place duties on the Council as client as well as the contractor)
 - (b) duty of care with respect to carriage of waste and waste disposal.
- 1.2 Contracts can be awarded by any front line service. Environmental Health will provide on request information on a site by site basis about the potential for contamination on council owned land. The enquiries should;
- (a) establish the site history using historic maps and the GIS/trades database
 - (b) determine if previous site investigation data is available
 - (c) where enquiries made under (a) indicate a potential for contamination but no site investigation data is available then provision must be made to obtain the necessary data before tendering the contract or make allowance in the specification/bill of quantities for the contractor to undertake the necessary investigation
 - (d) any new data collated under (c) must be copied to the Environmental Health Team which will act as the central store for information on site contamination.

This information will be passed onto contractors working on such a site. Where site specific information is not already available, the officer responsible for the

contract must ensure that the contractors are made aware. Any contractor would be expected to carry out due diligence tests on any site prior to undertaking works in order to satisfy themselves of the working conditions and take due precautions.

- 1.3 On a number of sites which are owned by the Borough Council, particularly those which were formerly landfills, site investigation followed by a risk assessment has shown that the site is safe to be used for current use provided the ground surface is maintained to a high standard. This will normally involve a regular inspection of the surface, regular litter picking to remove fragments of fill which have become exposed and maintaining the grass cover across the site.

Most of these sites will be under the management of Environmental Care but other land holding departments may also be affected. It is essential that it is clear in the maintenance contract that the contractor is responsible for maintaining the vegetation cover across the ground surface, what reporting procedures should take place when the surface is found to be damaged and which additional measures or restrictions are required on a site specific basis. For example on football pitches, goal mouth areas become worn, the Borough Council may require that such areas be dressed with new clean soil or for all nets and goal posts to be removed on some sites during the summer to give vegetation the chance to re-establish.

To ensure the site is maintained to an adequate standard, the land holding department must also nominate an officer to undertake a minimum of a bi-annual inspection to ensure the contractor is maintaining the site to the necessary standard. Note: this will require regular inspection of formal areas of public open space not currently inspected. The staffing and resource implications of this will need to be reviewed by the Borough Sport and Recreation Officer.

- 1.4 Where the Council or any utility company requires a contractor to place or repair services which cross sites identified as being contaminated, the opportunity must be taken to place the service into a clean trench. The old service should be dug out and all arisings removed from site immediately. The arisings should not be placed on the existing ground surface unless underlain by polythene sheeting to avoid the more contaminated material from depth contaminating the ground surface. The new trench should be lined with a geotextile and backfilled with a clean non-porous material such as clay. The cost of these works will be met by the client requiring the work to be undertaken. Where a water service is to be replaced, the advice of the Water Company and the Environmental Protection Team should be sought.

- 1.5 Where an easement is requested across land owned by the Borough Council which is known or suspected to be contaminated, the company requesting the easement must be given full access to information on the site history and any site investigation reports available. The company must only be granted consent to the easement subject to the following restrictions:
- (i) All works must be designed and constructed taking into account the ground conditions and the works must be completed in accordance with a scheme approved by the Head of Environmental Care.
 - (ii) Before commencement of the works a full method statement shall be submitted to and agreed by the Head of Environmental Care. All works must be completed in accordance with the agreed method statement.

2 Property Transactions

- 2.1 Given the Borough Council's extensive land holdings there is always an element of risk in that the land has been put to potentially contaminative uses, such as waste disposal, engineering workshops both in the past and present. In addition, the Borough leases property to private organisations that by the legitimate use of the land may have caused or be causing new contamination. It should however be recognised that much of the Borough Council's land holding is leased out to private organisations and hence the Council's powers, as landlords, will be dictated by the respective lease terms granted, which differ on a site by site basis.
- 2.2 The Borough Council must have a strategy that deals with:
- (a) contamination associated with existing land holdings (this should be looked at on a site by site basis as liabilities will vary due to long-term lease agreements)
 - (b) ensure that we do not unwittingly purchase any additional contaminated land without appreciating the long term implications of such a purchase with the price of the land reflecting the site's condition.
 - (c) contamination caused by persons/companies who lease our land.

3 Land Purchases/Acquisitions

Prior to committing the Borough Council to any new land purchases or acquisitions, Property Services/Legal Services must ensure that the full site history is known. This must include:

- a search of all available historical maps;
- a review of the information held by the Environmental Protection Team, including determining historic property details from relevant street sections to enable the trades information to be accurately correlated to the land in question;
- detailed enquiries from the vendor as to the former activities at the site, location of storage tanks, details of materials, fuels, wastes etc. stored and information on any spillages and these take the form of standard questions under pre-contract enquiries
- If there is any suggestion that the land is on or adjacent to land which has the potential to be contaminated, consultants shall be appointed to undertake an appropriate site investigation.

Only when the full implications of any contamination is known, can appropriate consideration be given to the potential long term cost implications and this can be reflected in the sale price. If the transaction continues advice should be sought from the Head of Environmental Care and Legal Services as to the need to address future liabilities, which will be dependent on the circumstances of the site.

Where land such as public open space is to pass to the Borough Council as part of a planning agreement (S106) the Planning Officer must require the developer to provide:

- (a) full site history information on the land to transfer, and
- (b) an appropriate level of site investigation data to be agreed with the Head of Environmental Care.

4 Leasing Property

Many of the commercial organisations to which we let property or land could undertake potentially contaminating activities, which may result in the land becoming contaminated. Under the provisions of the Environment Protection Act 1990 if the original polluter cannot be found (e.g. because the company no longer exists) the landowner becomes the person liable for the contamination and any site remediation required. If the Borough Council as a landowner does not take steps to prevent the occurrence of further off-site migration of contaminants then the Borough Council can also be found to be liable for the remediation of adjacent land.

In order to protect the value of its land holdings and to prevent the Borough Council becoming liable for our tenants' contamination, it is essential that we have a strategy/policy that will protect the Borough Council's interests in the long term. The Head of Property & Facilities management in conjunction with Head of Environmental Care & the Borough Solicitor will undertake any actions as may be required to mitigate liability including financial loss to the Council on council owned land which has or may become contaminated.

The Property Service and Legal Service should ensure that a specific strategy/documentation is in place to ensure the following:

5 Prior to Letting/Leasing Property in the Future

- (a) The Borough Council should ensure it provides all information available, on the quality of the site, to any prospective lessee.

If it is a greenfield site with no former potentially contaminate uses, ensure this is documented along with some background soil data to provide a baseline which can form the basis of any future claim. Where possible the onus should be placed on the new tenant to provide this background data.

- (b) If the site has previous uses, establish where potentially contaminating uses have taken place e.g. where are or where the fuel tanks, chemical storage were tanks etc. Again ensure this information is documented and provide appropriate background soil data. This is necessary not only to protect the Borough Council's interest but also to comply with our obligation in relation

to disclosure to the new tenant whose workers or contractors might come into contact with ground contamination.

Note: where new information becomes available to the Council regarding contamination during the term of the lease/tenancy agreement which may require action, then the Council must pass the information onto the tenant/lessee in order that they can make appropriate decisions.

- (c) Ensure there are appropriate conditions in the lease/tenancy agreement requiring the new occupier(s) to comply with all appropriate environmental legislation to minimise the potential for future contamination and to require them to clean up any spills which may occur during their occupation. The Borough Council's leases have standard clauses relating to the tenant's obligations to comply to all statutes and not to cause a nuisance to other adjoining property and hence such clauses will continue to be utilised to ensure the liability of any contamination caused on site lies with the tenant.

- (d) Ensure that it is clear in any new contract documents that prior to relinquishing the lease/tenancy the onus will be on them to return the land in a condition which is suitable for its existing use and prove that they have not caused any new contamination occurring then a site investigation will be necessary. Where the occupier's trade is such that there is a high risk of contamination to prove the site has not been affected or, if it has to quantify the problem. The results of the investigation can be compared to the original background data obtained prior to the commencement of the lease before agreeing the remediation works necessary and/or the appropriate level of financial compensation to the Council that is applicable. The new tenant/lessee will not be liable for contamination caused by a previous tenant/lessee.

- (e) During the course of the any new lease/tenancy agreements the tenant/lessee must provide the Council with:
 - details of the location/nature of fuel storage, documentation to confirm there has been no gradual loss of free product due to leakage;
 - plans showing where chemicals or wastes are stored;
 - plans showing where services and fuel lines etc. are;
 - a copy of any Health and Safety files created in compliance with the
 - Construction, Design and Management Regulations;
 - details of accidents/spillages etc;

- where locations are moved the Council must be advised in writing of the new details

6 Termination of a Tenancy/Lease Agreement

- (a) Prior to the determination of a lease/tenancy agreement for whatever reasons information should, where possible, be obtained from the tenant/lessee before they leave the site, while yard managers, supervisors etc. are still available who can provide specific information on the site such as that outlined in 6(e) above.
- (b) Where there is any question that there may have been land contamination, the tenant/lessee should be required to provide site investigation data to prove the site remains in the same condition as when the background site investigation was undertaken at the commencement of the lease and if not to provide proof of the extent of any contamination present.
- (c) Where contamination is present the tenant/lessee must be required to carry out remedial work on the contamination as to the standard identified by the background site investigation or provide financial compensation to the Borough Council in order that it may undertake the remedial works as far as the Council are able to do so under the terms of the lease and the statute governing it.

7 Marketing Sites

Where land owned by the Borough Council is being sold, it is essential that the Borough Council provides all information that might affect the value of the site or its future redevelopment to the potential purchaser. This should include where available:

- site history information
- geotechnical and contamination site investigation reports
- desk study reports
- details of the location of fuel tanks, waste disposal areas, soakaways etc.

If the site is suspected to be contaminated, then the potential purchaser must be given the opportunity to undertake their own site investigation to establish the extent of any problem. The decision as to the level of investigations undertaken will rest with the purchaser.

The information on contamination and potential remedial costs for an agreed end use should be taken in to account when valuing the land. This process must be fully documented to protect the Borough Council from future legal action/claims by the purchaser or other future owners.

Appendix B

Planning and building control

1 Planning Control

For the purposes of the Town and Country Planning Act 1990, the potential for contamination is a material planning consideration to be taken into account during the normal course of development. The government has indicated that it considers that the redevelopment phase is the most appropriate and cost effective time to deal with contamination issues, stressing that Local Authorities should make full use of the powers available to them in accordance with the guidance issued in Planning Policy Statement Notes 23 (PPS 23). Highlighting the importance of considering any contaminated land issues at the application stage.

Paragraph 4.5 of PPS 23 states 'the best way of minimising any associated risks is to ensure that sites which may be contaminated are identified at the earliest stage of planning. The history of the site or nearby sites is the principal factor in determining whether a site is likely to be contaminated or not. The document goes on to say that the responsibility for providing information on whether land is contaminated rests primarily with the developer (Para 4.10). The recently introduced 1APP standard application form for planning applications within England and Wales includes a question on former use. The New application process requires;

- 1.1 that where existing land use records indicate a potential for contamination or where the redevelopment will involve the introduction of a sensitive land use i.e. residential properties a full desk study should be provided by the developer (unless the Planning Officer, in consultation with the Head of Environmental Care, determines sufficient information has been provided by the applicant). The desk study will provide a comprehensive site history with historic maps etc. The Hampshire Contaminated Land Working Group has produced a leaflet titled Guidance for Developing on Contaminated Land this is available to download from the Councils website <http://www.basingstoke.gov.uk/NR/rdonlyres/9CB14608-2114-4AC3-9F97-78410C3435F4/0/ContaminatedLandGuidanceforDevelopers.pdf>,
- 1.2 The Planning Officer should liaise with Environmental Protection and wherever the information provided indicates the potential for contamination or the Local Authority hold such information (which can be copied to the developer on request) planning permission shall only be granted

subject to conditions requiring appropriate site investigation prior to the commencement of the development and site remediation prior to occupation of the development, where such is found to be necessary.

- 1.3 Where land such as public open space is to pass to the council as part of a planning agreement (Section 106 agreement under the Town and Country Planning Act 1990) the Planning Officer must consult with the Environmental Protection Team to establish the potential for contamination and if necessary require the developer to provide:
 - a) full site history information on the land to transfer, and
 - b) an appropriate level of site investigation data to be agreed with the Environmental Protection Team.
- 1.4 In some circumstances a site investigation may be requested prior to determination of an application.
- 1.5 Where conditions relating to site investigation and/or remediation are imposed on planning approvals the developer shall ensure that the conditions are complied with before development commences. It is almost impossible to undertake a site investigation or implement remedial measures once development is underway, so all works required by the conditions must be agreed at an early stage. A failure to comply with such conditions will result in enforcement action by the Compliance and Enforcement Team within the Planning and Transport Business Unit. Failure to comply with any planning conditions and unsatisfactory completion of remediation may result in the site being determined as contaminated land.
- 1.6 The LPA is required by the Town and County Planning Act (GDP - 1995) (as amended) to consult with the EA in respect of certain types of application.
- 1.7 Open discussion of all information related to potential contamination at the development stage and the application of conditions is the only sensible way forward to ensure the safe development of brownfield sites. This openness and validation of the clean up process will ultimately ensure market confidence in the redevelopment of brownfield sites and thus promote the recycling of such sites which is in line with government policy.

2 Building Control

- 2.1 The Building Regulations 1991 give the Building Control Officers authority to address contamination and landfill gas issues within the building footprint. Where a site is known to be on or adjacent to, a gassing landfill Building Control Approval will only be granted subject to the design of the building(s) incorporating adequate gas control measures.
- 2.2 Where historical maps or existing site investigation data indicate that the proposed development is/or may be located on greater than one metre of made ground, Building Control approval will only be granted subject to the developer either:
- (a) incorporating basic passive gas protection measures into the building design/construction or
 - (b) undertaking an appropriate level of site investigation.
- 2.3 Where the ground investigation reveals any methane or significant organic material within the ground, the developer must provide a report by a competent person experienced in the development of buildings on gassing sites. The investigation report must include gas monitoring on at least 6 separate occasions at appropriate locations over a minimum period of 3 months, over a variety of weather conditions and atmospheric pressures and include at least two periods of low and falling barometric pressure (falling below 1005MB). (Reference: Waste Management Paper No.27 on Landfill Gas and CIRIA report number 150 on Methane Investigation Strategies). The competent person should provide written confirmation that the building design provides adequate protection for the gas regime recorded at the site.
- 2.4 Although the Building Control process is fundamental to the safe redevelopment of brownfield sites, it is not sufficient to have a strategy which relies on remediation controlled by building control alone because:
- (a) Building Control Officers have no control over the safe remediation of landscaped areas and car parks outside the building footprint and
 - (b) an increasing number of developers are making use of new provisions which enable them to utilise the services of private building control officers rather than LA officers. Obviously the private sector practitioners will not have the same local knowledge about historic uses.

Consequently, a multi-disciplinary approach to approval of remediation schemes requires involving Building Control, Planning and Environmental Health.

Appendix C

Summary of guidance from DEFRA

1. Making the determination

- 1.1 The Local Authority shall carry out an appropriate scientific and technical assessment of the circumstances of the land, using all of the relevant and available evidence. The authority shall then determine whether any of the land appears to it to meet the definition of Contaminated Land set out in section 78A(2) of the Environmental Protection Act 1990 (EPA1990). Where the Local Authority has received information or advice given by other regulatory bodies it must have regard to that information or advice.
- 1.2 There may be cases where the presence of one or more contaminants is discovered on land which is undergoing, or is about to undergo, development. Where this occurs, the Local Authority shall consider what action is appropriate under both Part IIA of the Environmental Protection Act 1990 and town and country planning legislation (see Appendix C). Where the Local Authority is not the local planning authority, the two authorities will need to consult.
- 1.3 The Local Authority shall prepare a written record of any determination that land is Contaminated Land, providing a summary of the basis on which the land has been identified as such land. This will include information on the specific significant pollutant linkage, or linkages, found.

2 Information Arising from the Inspection of Land

- 2.1 As the Local Authority inspects its area, it will generate a substantial body of information about the condition of different sites in its area.
- 2.2 Where land has been determined as being contaminated land, and consequent action taken, the Local Authority has to include specified details about the condition of the land, and the Remediation Actions carried out on it, in its Public Register. Having this information on the Register makes it readily available to the public and to those with an interest in the land. A copy of this register can be found on the Local Authority website.

- 2.3 The Local Authority may also be asked, for example as part of a 'local search' for a property purchase, to provide information about other areas of land which have not been determined as Contaminated Land. This might include, for example, information on whether the authority had inspected the land and, if so, details of any site investigation reports prepared.
- 2.4 The Environmental Information Regulations 1992 (S.I. 1992/3240 as amended) and Freedom of Information Act 2002 may apply to any information about land contamination. This means that, depending on the circumstances and the particular information requested, the authority may be obliged to provide the information when requested to do so. However, this is subject to the requirements in the 1992 Regulations relating to commercial confidentiality, national defence and public security.
- 2.5 Even where land has not been determined as Contaminated Land, information collected under Part IIA of the Environmental Protection Act 1990 may also be useful for the wider purpose of the Local Authority and other regulatory bodies, including:
- a) Planning and building control functions; and
 - b) other relevant statutory pollution control regimes (for example, powers to require the removal of illegally-deposited controlled wastes).

3. Identification of interested persons

- 3.1 For any piece of land determined as being contaminated land, the Local Authority shall establish:
- (a) who is the owner of the land (defined in section 78A(9) of the Environmental Protection Act 1990);
 - (b) who appears to be in occupation of all or part of the land; and
 - (c) who appears to be an appropriate person to bear responsibility for any remediation action which might be necessary (defined in section 78F of the Environmental Protection Act 1990). At this early stage, the Local Authority may not be able to establish with certainty who falls into each of these categories, particularly the last of them. As it obtains further information, the authority needs to reconsider these questions. It needs to act, however, on the basis of the best information available to it at any particular time.

4. Notifying those who may need to take action

- 4.1 The Local Authority shall notify, in writing, the persons set out in paragraph 3.1 above as well as the Environment Agency, of the fact that the land has been determined as being Contaminated Land. The notice given to any of these persons will inform them of the capacity – for example, Owner or Appropriate Person – in which they have been sent it.
- 4.2 The Local Authority (or, in the case of a Special Site, the Environment Agency) may, at any subsequent time, identify some other person who appears to be an Appropriate Person, either as well as or instead of those previously identified. Where this happens, the relevant authority needs to notify that person that he appears to be an Appropriate Person with respect to land which has been identified as Contaminated land (section 78B(4) Environmental Protection Act 1990).
- 4.3 The issuing of a notice under either of these headings has the effect of starting the process of consultation on what Remediation might be appropriate. The Local Authority (or the Environment Agency) may therefore wish to consider whether to provide any additional information to the recipients of the notification, in order to facilitate this consultation. The following categories of information may be useful for these purposes:
- (a) a copy of the written record of the determination made by the authority that the land appears to be Contaminated Land;
 - (b) information on the availability of site investigation reports, with copies of the full reports being available on request;
 - (c) an indication of the reason why particular persons appear to the authority to be Appropriate Persons; and
 - (d) the names and addresses of other persons notified at the same time or previously, indicating the capacity in which they were notified (eg as Owner or as Appropriate person).
- 4.4 The authority will also need to inform each Appropriate Person about the tests for Exclusion from, and Apportionment of liabilities set out in the statutory guidance. This will enable those persons to know what information they might wish to provide the authority, in order to make a case for their Exclusion from

liability, or for a particular Apportionment of liability.

4.5 The notification to the Environment Agency enables the Agency to decide

whether:

- (a) it considers that the land should be designated a Special Site, on the basis that it falls within one or more of the relevant descriptions;
- (b) it wishes to provide site-specific guidance to the Local Authority, for example on what Remediation might be required; or]
- (c) it requires further information from the Local Authority about the land, in order for the Environment Agency to prepare its national report. If the Environment Agency requires any further information from the Local Authority, it should request this in writing. The Local Authority should provide such information as it has or can 'reasonably be expected to obtain'.

5. Identifying Possible Special Sites

5.1 Having identified any Contaminated Land, the Local Authority shall consider whether the land also meets any of the descriptions which would require it to be designated as a Special Site. These descriptions are prescribed in the Contaminated Land (England) Regulations 2000 (regulations 2&3). If the Local Authority concludes that it should designate any land, it will need to notify the Environment Agency.

5.2 The authority needs to reconsider this question whenever it obtains further relevant information about the land, for example after the carrying out of any Assessment Action under the terms of a Remediation Notice.

6. Role of the Enforcing Authority

After the Local Authority has identified any Significant Pollutant Linkage, thus determined that the land is contaminated land and then carried out the necessary notifications, it is for the Enforcing Authority (that is, the Environment Agency for any Special Site and the Local Authority for any other site) to take further action.

7. Urgent Remediation Action

- 7.1 Where it appears to the Enforcing Authority that there is an imminent danger of serious Harm or serious Pollution of Controlled Waters being caused as a result of a Significant Pollutant Linkage that has been identified, that authority may need to ensure that urgent Remediation is carried out.
- 7.2 The Enforcing Authority needs to keep this question under review as it receives further information about the condition of the Contaminated Land. It may decide that urgent Remediation is needed at any stage in the procedures set out below. It is likely that any Remediation Action carried out on an urgent basis will be only a part of the total Remediation Scheme for the relevant land or Waters, as not all of the Remediation Actions will need to be carried out urgently.
- 7.3 The terms 'imminent' and 'serious' are not defined in Part IIA of the Environmental Protection Act 1990. The Enforcing Authority needs to judge each case on the normal meaning of the words and the facts of that case.
- 7.4 Where the Enforcing Authority is satisfied that there is a need for urgent Remediation, two requirements which normally apply to the service of Remediation Notices are disapplied (section 78G(4) 7 78H(4) of the Environmental Protection Act 1990). These are the requirements for:
- (a) prior consultation (section 78H(1) of the Environmental Protection Act 1990; and
 - (b) a three month interval between:
 - (i) the notification to the Appropriate Person that the land has been identified as Contaminated land or the land's designation as a Special Site; and
 - (ii) the service of the remediation notice (section 78H(3) of the Environmental Protection Action 1990.
- 7.5 However, other requirements in the primary legislation and in the statutory guidance continue to apply in particular with respect to:

- (a) the standard of Remediation and what Remediation Actions may be required (section 78E(4) of the Environmental Protection Act 1990; and
- (b) the identification of the Appropriate Person and any Exclusions from, or Apportionments of, responsibility to bear the cost of Remediation (section 78F of the Environmental Protection Act 1990).

7.6 In general where there is a need for urgent Remediation Action, the Enforcing Authority will act by serving a Remediation Notice on an urgent basis, that is, without necessarily consulting or waiting for the end of the three month period referred to in paragraph 7.4 (a) & (b) above. However, if the Enforcing Authority considers that serving a Remediation Notice in this way would not result in the Remediation happening soon enough, it may decide to carry out the Remediation itself. The authority has the power to do this only where it considers that:

- (a) there is an imminent danger of serious Harm or serious Pollution of Controlled Waters, being caused; and
- (b) it is necessary for the authority to carry out Remediation itself to prevent that harm or pollution (section 78N(3) (a) of the Environmental Protection Act 1990).

7.7 These circumstances may apply, in particular, if the Enforcing Authority cannot readily identify any Appropriate Person on whom it could serve a Remediation Notice. These may also be cases where the Enforcing Authority considers that urgent Remediation is needed and has already specified the necessary Remediation Actions in a Remediation Notice, but the requirements of that notice have been suspended pending the decision in an appeal against the notice.

7.8 If the Enforcing Authority carries out any urgent Remediation itself, it needs to prepare and publish a Remediation Statement describing the Remediation Actions it has carried out (section 78H(7) of the Environmental Protection Act 1990). It needs also to consider whether to seek to recover, from the appropriate person, the reasonable costs the authority has incurred in carrying out the Remediation (section 78P(1) of the Environmental Protection Act 1990).

Appendix D

Glossary

DEFRA Circular 01/2006 contains a detailed glossary of terms that provides legal definitions of terms that may be used in this Strategy.

Appendix E

Background papers/references

1. Part IIA Environmental Protection Act 1990
2. The Environment Act 1995
3. Contaminated Land (England) Regulations 2006
4. Planning Policy Statement 23: Planning and Pollution Control
5. Circular No.11/95: The Use of Conditions in Planning Permissions
6. Health and Safety Executive Guidance Document: Protection of Workers and the General Public During the Development of Contaminated Land Building Regulations 1991
7. Public Registers of Land Which May Be Contaminated: DoE 1991
Consultation Paper DoE 1996 Industry Profiles Part IIA Environmental Protection Act 1990
8. Contaminated Land Report (CLR)
9. CLR1 A Framework for assessing the impact of contaminated land on groundwater and surface water
10. CLR2 Volume One (of Two) – Guidance on Preliminary Site Inspection of Contaminated Land
11. CLR2 Volume Two (of Two) – Guidance on Preliminary Site Inspection of Contaminated Land
12. CLR3 Documentary research on industrial sites
13. CLR4 Sampling Strategies for Contaminated Land
14. CLR5 Information Systems for Contaminated Land
15. CLR6 Prioritisation and Categorisation Procedure for Sites which may be Contaminated

16. CLR7 An overview of the development of soil guideline values and related research
17. CLR8 Potential contaminants for the assessment of land
18. CLR9 Contaminants in soil: Collation of toxicological data and intake values for humans
19. CLR10 The Contaminated Land Exposure Assessment (CLEA) model: Technical Basis and Algorithms
20. CLR11 The Model Procedures for the management of land contamination

Soil Guideline Value (SGV) Reports exist for; Arsenic, Cadmium, Chromium, Inorganic Mercury, Nickel, Phenol, Selenium, Lead, Toluene and Ethylbenzene.

Toxicological (TOX) Reports exist for: Arsenic, Benzo[a]pyrene, Cadmium, Chromium, Inorganic Cyanide, Lead, Mercury, Nickel, Phenol, Selenium, Benzene, Dioxins, Furans and Dioxin like PCBs, Toluene, 1,1,2,2-Tetrachloroethane, Ethylbenzene, Vinyl Chloride, Naphthalene, 1,2-Dichloroethane, Tetrachloroethane, Trichloroethane.

Environment Agency CLEA Guidance www.environment-agency.gov.uk

